

CLAIMS

Therefore, having thus described the invention, at least the following is claimed:

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1. A connector, comprising:

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means for receiving a first end of a tubing assembly junction;

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means for engaging a substantial portion of the first end of the tubing assembly

4

junction;

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means for receiving a second end of a tubing assembly junction; and

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means for securely coupling the tubing assembly junction wherein forces

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applied along the longitudinal axis of the tubing assembly do not result in

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disengagement of the tubing assembly at the junction.

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2. The connector of claim 1, wherein the means for engaging comprises a

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housing.

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3. The connector of claim 1, wherein the means for receiving a first end

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comprises a slot.

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4. The connector of claim 1, wherein the means for receiving a second

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end comprises an aperture.

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5. The connector of claim 1, wherein the means for securely coupling

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comprises a tapered inner surface of the housing.

1 6. The connector of claim 1, wherein the means for securely coupling
2 comprises a restrictor.

1 7. The connector of claim 2, wherein the housing forms an aperture.

1 8. The connector of claim 3, wherein the slot is substantially parallel with
2 the longitudinal axis of the connector.

1 9. The connector of claim 6, wherein the restrictor comprises a plate.

1 10. The connector of claim 6, wherein the restrictor comprises a tab.

1 11. The connector of claim 8, wherein the housing forms a slot having a
2 width that is smaller than the outer diameter of an exit tube of the tubing assembly.

1 12. The connector of claim 9, wherein the plate forms an inlet port having
2 a width that is smaller than the outer diameter of an inlet tube of the tubing assembly.

1 13. The connector of claim 9, wherein the plate forms an inlet port having
2 a width that is smaller than the outer diameter of a nipple of a coupler of the tubing
3 assembly.

1 14. The connector of claim 10, wherein the tab is biased into the aperture
2 of the housing.

1 15. A method for securely coupling a tubing assembly, comprising:
2 selecting an appropriately configured universal connector;
3 inserting a first end of a tubing assembly junction within a housing of the
4 universal connector; and
5 axially rotating a second end of a tubing assembly junction until the tubing
6 assembly junction is substantially aligned with the longitudinal axis of the connector.

1 16. The method of claim 15, wherein the step of inserting a first end of a
2 tubing assembly junction comprises substantially enveloping the outer circumference
3 of a first tube of the tubing assembly.

1 17. The method of claim 15, wherein the step of inserting a first end of a
2 tubing assembly junction comprises engaging an exterior surface of a structure of the
3 tubing assembly junction with an inner surface of the connector.

1 18. The method of claim 15, further comprising:
2 biasing a structure of the housing of the connector to engage an outer surface
3 of the tubing assembly junction.

1 19. The method of claim 18, wherein the structure comprises a restrictor.

- 1 20. A connector, comprising:
2 a housing having an inlet port, an outlet port, and a tapered inner surface,
3 wherein the housing is configured to closely surround and contact a first end of a
4 tubing junction; and
5 a restrictor fixedly attached to the housing, the restrictor configured to engage
6 a second end of the tubing junction.